

I claim:

1. A method for valuing options comprising:

- selecting an option;
- providing empirical data that corresponds to the option;
- processing the empirical data using regression modeling to provide an option valuation model for the option;
- using the option valuation model to value the option with respect to future worth.

2. The method of claim 1 wherein selecting an option further comprises selecting at least one of:

- an index option;
- an interest rate option;
- a currency option;
- a bond option;
- a stock option;
- a commodity option;
- a futures contract;
- a forward contract.

3. The method of claim 1 wherein providing empirical data that corresponds to the option further comprises providing empirical data for a substantially immediately preceding window of time.

4. The method of claim 1 wherein providing empirical data that corresponds to the option further comprises providing empirical data for a preceding window of time having at least a predetermined duration.

5. The method of claim 4 wherein providing empirical data for a preceding window of time having at least a predetermined duration further comprises providing empirical data for a preceding window of time comprising at least fifty days.

6. The method of claim 1 wherein providing empirical data that corresponds to the option further comprises providing pricing information that corresponds to the option.
7. The method of claim 6 wherein providing pricing information that corresponds to the option further comprises providing daily closing prices for a plurality of days as corresponds to the option.
8. The method of claim 1 wherein processing the empirical data using regression models to provide an option valuation model for the option further comprises projecting market option prices over localized regions of the option's state process.
9. The method of claim 8 wherein projecting market option prices over localized regions of the option's state process further comprises projecting market option prices over localized regions of the option's state process up to projected maturity of the option.
10. The method of claim 1 wherein processing the empirical data using regression modeling to provide an option valuation model for the option further comprises providing a structural option valuation model that models the option's non-linear behavior around a corresponding strike price.
11. The method of claim 10 wherein providing a structural option valuation model that models the option's non-linear behavior around a corresponding strike price further comprises providing a structural option valuation model that models the option's non-linear behavior around a corresponding strike price by use of a moneyness variable.
12. The method of claim 1 wherein processing the empirical data using regression modeling to provide an option valuation model for the option further comprises providing a reduced-form option valuation model.

13. The method of claim 1 wherein processing the empirical data using regression modeling to provide an option valuation model for the option further comprises projecting market options onto a quadratic state-space of corresponding state variables that characterize the option.

14. The method of claim 13 wherein processing the empirical data using regression modeling to provide an option valuation model for the option yet further comprises taking into account implied volatility of the option.

15. The method of claim 1 wherein using the option valuation model to value the option with respect to future worth further comprises localizing estimation of option regressions to sub-regions of overall state space as corresponds to the option.

16. The method of claim 15 wherein localizing estimation of option regressions to sub-regions of overall state space as corresponds to the option further comprises sequentially estimating option regressions as a function, at least in part, of maturity-moneyness clusters over a rolling estimation window.

17. The method of claim 1 wherein processing the empirical data using regression data to provide an option valuation model for the option further comprises providing a plurality of different option valuation models.

18. The method of claim 17 wherein providing a plurality of different option valuation models further comprises:

- developing resultant data using the plurality of different option valuation models;
- comparing the resultant data with historical data for the option;
- selecting a particular one of the plurality of different option valuation models as based, at least in part, on comparing the resultant data with historical data for the option to provide a selected option valuation model.

19. The method of claim 18 wherein using the option valuation model to value the option with respect to future worth further comprises using the selected option valuation model to value the option with respect to future worth.

20. A digital memory having stored therein instructions that correspond, at least in part, to:

- empirical data that corresponds to an option;
- an option valuation model derived as a function, at least in part, of processing the empirical data using regression modeling.

21. The digital memory of claim 20 wherein the option comprises at least one of:

- an index option;
- an interest rate option;
- a currency option;
- a bond option;
- a stock option;
- a commodity option;
- a futures contract;
- a forward contract.

22. The digital memory of claim 20 wherein the option valuation model further comprises an option valuation model that is derived as a function, at least in part, of projecting market option prices over localized regions of state processes of the option.

23. The digital memory of claim 22 wherein the option valuation model further comprises an option valuation model that is derived as a function, at least in part, of projecting market option prices over localized regions of state processes of the option up to projected maturity of the option.